LANL debuts hybrid garbage truck

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Truck uses hydraulic pressure to improve efficiency by 30 percent

LOS ALAMOS, New Mexico, November 19, 2010— Los Alamos National Laboratory has begun using a diesel-hydraulic hybrid truck for daily garbage pickup, improving fuel efficiency by 30 percent and reducing greenhouse gas emissions by even more.

The Peterbilt Model 320 replaces one of the Lab's two garbage trucks. Each truck runs 40 hours per week and racks up tens of thousands of miles every year.

"The trucks we have are aging," said Monica Witt, an environmental manager in the Lab's Utilities and Infrastructure organization. "With the new truck, you save on maintenance costs and gas, while reducing greenhouse emissions."

The truck employs a system that stores energy from braking and uses that pressure to help the truck accelerate after each stop—a key feature in the stop-and-go life of a garbage truck. Traditional trucks lose that energy as heat during braking.

The "Hydraulic Launch Assist" system can generate up to 380 horsepower and also reduces engine noise.

"Testing has proven that the Model 320 Hybrid is an ideal environmental option for refuse applications," said Bill Jackson, Peterbilt general manager and PACCAR vice president. "Municipalities and refuse customers have realized dramatic improvements in fuel economy and significant reductions in emissions and maintenance costs while operating the Model 320 Hybrid."

The truck is part of a comprehensive LANL plan to meet Department of Energy requirements to reduce greenhouse gas emissions by 28 percent by the year 2020.

Los Alamos County debuted two similar models in August.